

January 2017 Climate Review for Puerto Rico and U.S. Virgin Islands.

Synopsis: *Rainfall averaged below normal across the eastern half of PR, Culebra, Vieques, and the USVI while averaging above normal across the interior and western PR. There is a higher chance to observe normal to above normal rainfall during Feb-Mar-Apr. Temperatures were slightly above normal.*

Summary

A seasonable weather pattern prevailed across the islands during the month. The only significant weather feature observed was the passage of a cold front between the 10th – 11th of the month, which caused widespread shower activity across the islands and very hazardous marine conditions. Outside of this event, most of the days featured fair weather conditions with passing trade showers affecting the islands from time to time. Based on the Cooperative Observer Network Data (COOP), 83 % of the normal rainfall was observed across PR. Preliminarily, an average rainfall total of 2.78 inches was measured, which is 0.55 inches below normal (Table 1).

The mean temperature across PR was 74.5°F, which is approximately 1.1°F warmer than the 30-year average from the National Centers for Environmental Information (NCEI). At the primary climatological data sites, a mean temperature of 77.7 and 78.1°F was observed at Henry E. Rohlsen Airport in Saint Croix (TISX) and Cyril E King Airport in St Thomas (TIST) which is 0.5 and 0.7 °F above normal, respectively.

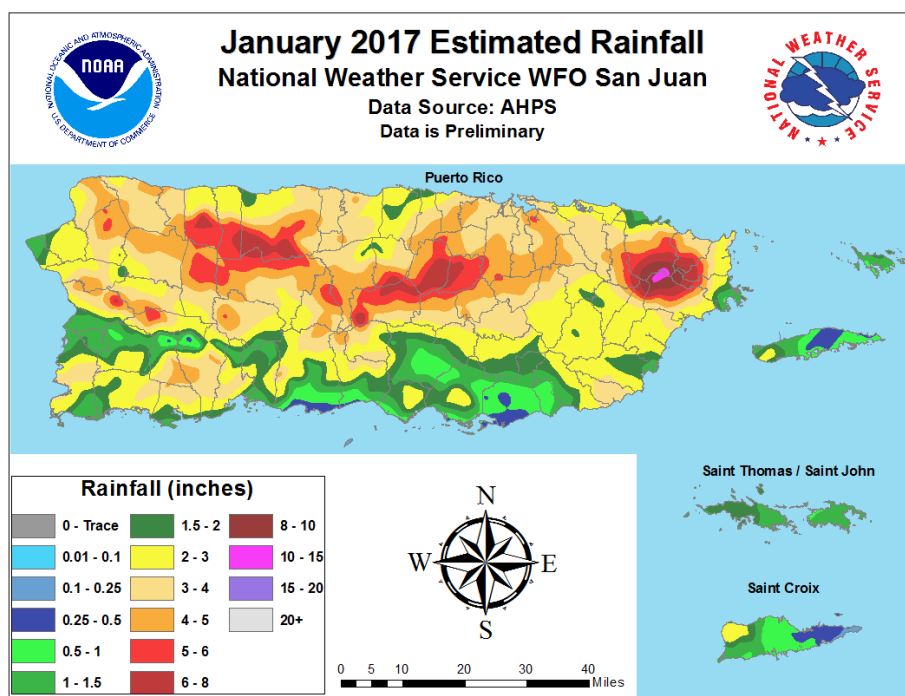
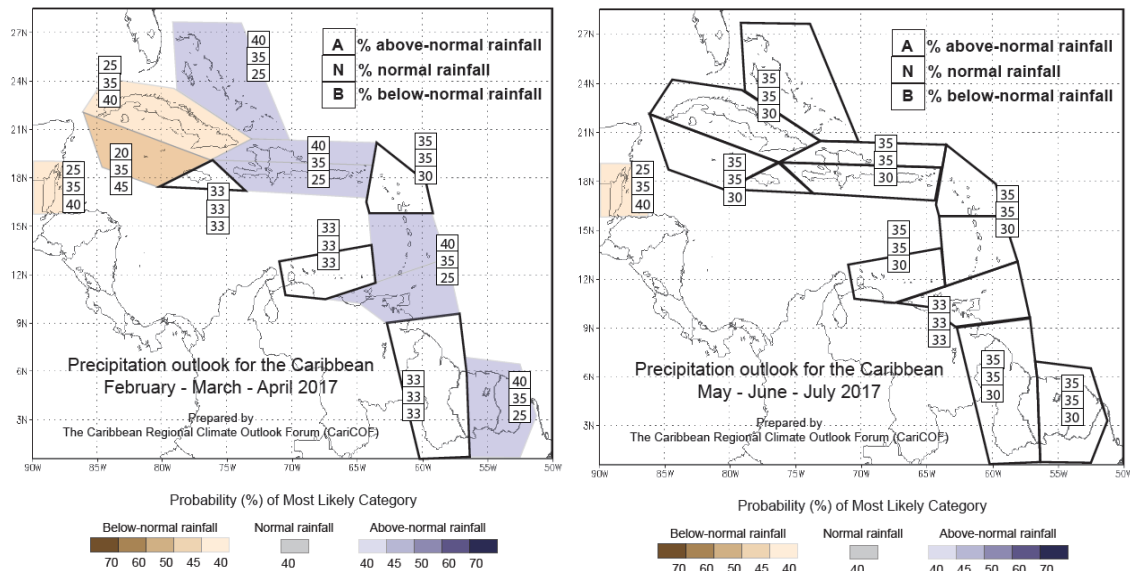


Figure 1. January 2017 Rainfall Accumulations.

Looking Ahead

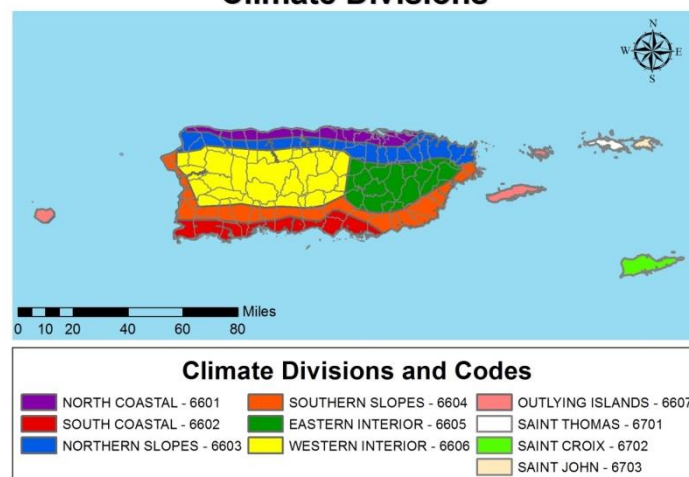


A transition to ENSO – neutral is expected to occur by February 2017, with ENSO – neutral then continuing through the first half of 2017. The Tropical North Atlantic Sea Surface Temperatures are currently slightly above average throughout the Caribbean Islands. Small positive SST anomalies are expected to persist throughout the region and portions of the Tropical North Atlantic during Feb-Mar-Apr, but mostly fade by May-Jun-Jul. Under this evolving pattern, there is a higher chance to observe normal to above normal rainfall Feb-Mar-Apr with equal chances for May-Jun-Jul.

More Info: <http://rcc.cimh.edu.bb/long-range-forecasts/caricof-climate-outlooks/>

Average Rainfall Accumulation per climate zones based on COOP

Puerto Rico and U.S. Virgin Islands Climate Divisions



	North Coastal	South Coastal	Northern Slopes	Southern Slopes	Eastern Interior	Western Interior	All PR	St Thomas / St John	St Croix
Observed	3.07	1.33	4.46	0.90	3.96	4.15	2.78	0.69	2.40
Normal	4.06	1.62	4.20	2.00	4.69	3.41	3.33	2.72	2.00
% PON per month	76	82	106	45	84	122	83	25	120
Accumulated	3.07	1.33	4.46	0.90	3.96	4.15	2.78	0.69	2.40
Normal accumulation	4.06	1.62	4.20	2.00	4.69	3.41	3.33	2.72	2.00
% PON accumulated	76	82	106	45	84	122	83	25	120

Table 1. 2017 Rainfall Totals (inches) and Percent of Normal (PON).

Historical Rainfall and Temperature

	Puerto Rico		San Juan Area		IST		ISX	
1	1983	1.30"	1978	0.61"	2013	0.48"	2011	0.49"
2	1985	1.30"	1983	0.69"	2016	0.50"	1977	0.54"
3	1976	1.51"	1960	0.94"	2007	0.76"	2009	0.60"

Table 2. Driest Januarys

	Puerto Rico		San Juan Area		IST		ISX	
1	1992	7.70"	1937	15.47"	2006	4.83"	1963	7.35"
2	2005	6.51"	1902	12.45"	1995	4.6"	2005	5.26"
3	1997	6.29"	2010	11.07"	1956	4.19"	1952	4.77"

Table 3. Wettest Januarys

	Puerto Rico**		San Juan Area		IST		ISX	
1	1948	75.6°F	2014	80.2°F	1994	80.8°F	1973	80.6°F
2	2007	75.0°F	1981	79.8°F	1995	80.2°F	1994	80.0°F
3	2002	74.8°F	2015	78.9°F	1993	80.1°F	1999	79.7°F

Table 4. Warmest Januarys

	Puerto Rico**		San Juan Area		IST		ISX	
1	1941	66.2°F	1950	73.3°F	1955	75.0°F	2012	73.4°F
2	1943	70.6°F	1917	73.4°F	2012	75.5°F	1979	75.2°F
3	2000	71.2°F	1907	73.4°F	1956	76.0°F	1955	75.5°F

Table 5. Coolest Januarys

****The following years are not included -do not meet WMO criteria % of missing days, 40, 56, 57, 58, 59, 60, 67, 69, 73, 74.**

	Puerto Rico	San Juan Area	IST	ISX
Temperature	73.4 °F	77.6 °F	78.8 °F	78.2 °F
Rainfall	3.41"	3.76"	2.38"	2.14"

Table 6. Normal Values for January

Monthly and Seasonal Highlights for Primary Climatological Data Sites.

	Jan
San Juan Area	5 th warmest
IST	---
ISX	---

Table 7. January 2017

Additional Highlights Based on COOP Data

Wettest Days

Station	Inches (inches)	Date
ARECIBO OBSY	2.88	1/11/2017
MOROVIS 1 N	2.64	1/11/2017
PALMAREJO VEGA BAJA	1.66	1/11/2017

Highest Maximum Temperatures

Station	Temperature (°F)	Date
LAJAS SUBSTN	90	1/1/2017
San Juan Area	90	1/24/2017
SAN JUAN L M MARIN AP	90	1/24/2017

Lowest Minimum Temperatures

Station	Temperature (°F)	Date
MARICAO 2 SSW	51	1/14/2017
LAJAS SUBSTN	57	1/21/2017
AGUIRRE	58	1/19/2017

Data is preliminary and has not undergone final quality control by the National Centers for Environmental Information / NCEI/. Therefore, this data is subject to revision. Report based on data received until February 5th 2016.

Puerto Rico Climate Record Period: 1940 to 2017

San Juan Metro Area Climate Record Period: 1898 to 2017 (Primary climatological site)

Cyril E. King Airport/St Thomas Climate Record Period: 1953 to 2017 (Primary climatological site)

Henry E. Rohlsen Airport/St Croix Climate Record Period: 1951 to 2017 (Primary climatological site)